IN THE CLAIMS:

Claims 3, 6-10, 13, 16 and 18-52 were previously cancelled. Claims 14 and 17 were canceled by way of Examiner's Amendment. Claims 1 and 11 have been amended herein. This listing of claims will replace all prior versions and listings of claims in the application. Please enter these claims as amended.

1. (Currently Amended) A method for forming an isolation structure for a semiconductor device, comprising:

depositing a dielectric material onto a semiconductor substrate;

depositing a buffer material onto the dielectric material;

removing a portion of the ~~buffer film~~ buffer material, a portion of the dielectric material, and material from the semiconductor substrate to form at least one trench extending into the semiconductor substrate, the trench including at least one side wall;

forming an oxide on exposed portions of the semiconductor substrate within the at least one trench;

removing a portion of the buffer material to reduce a thickness of the buffer material and laterally recess a side wall defined by the buffer material relative to a side wall defined by the dielectric material and relative to a side wall of the at least one trench;

applying isolation material to remaining buffer material, in contact with a portion of the dielectric material exposed laterally adjacent to the side wall of the at least one trench, and filling the at least one trench;

removing portions of the isolation material from the remaining buffer material; and

removing the remaining buffer material to exposed side walls of at least one isolation structure protruding from the dielectric material and located laterally beyond corresponding side walls of the at least one trench.

2. (Previously presented) The method of claim 1, wherein forming the oxide includes thermally oxidizing portions of the semiconductor substrate exposed within the at least one trench.

3. (Canceled)

4. (Previously presented) The method of claim 1, wherein removing the portion of the buffer material includes reducing a thickness of the buffer material remaining on the dielectric material.

5. (Previously presented) The method of claim 1, further including annealing the isolation material, the dielectric material, and the oxide.

6.-10. (Canceled)

11. (Currently amended) A method for forming a capped shallow trench isolation structure for a semiconductor device, comprising:

applying a dielectric material to a semiconductor substrate;

applying buffer material to the dielectric material;

etching through the buffer material, through the dielectric material, and into the semiconductor substrate to define at least one trench in the semiconductor substrate;

forming an oxide on side walls and a bottom of the at least one trench in the semiconductor substrate;

laterally recessing at least one side wall of the buffer material to expose portions of an upper surface of the dielectric material adjacent to an upper edge of the at least one trench while an upper surface of the buffer material is exposed;

applying isolation material to the buffer material, exposed portions of the upper surface of the dielectric material, and the oxide, the isolation material substantially filling the at least one trench;

removing portions of the isolation material ~~layer~~ above the buffer material;

removing remaining buffer material; and

etching the isolation material to form a capped shallow trench isolation structure with side walls that are located laterally beyond corresponding side walls of the at least one trench.

12. (Previously Presented) The method of claim 11, wherein forming the oxide includes thermally oxidizing material of the semiconductor substrate at the side walls of the at least one trench.

13. (Canceled)

14. (Canceled)

15. (Previously presented) The method of claim 11, further comprising annealing the isolation material, the dielectric material, and the oxide.

16.-52. (Canceled)